**Before the**
**FEDERAL COMMUNICATIONS COMMISSION**
**Washington, D.C. 20554**

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| In the Matter of<br><br>Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All American in a Reasonable And Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996 | ) | GN Docket No. 07-45 |

**COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®**


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**COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®**

CTIA – The Wireless Association® ("CTIA")[1] submits the following comments in response to the Federal Communications Commission's ("Commission" or "FCC") April 16, 2007 *Notice of Inquiry* requesting information regarding the state of deployment of "advanced telecommunications services," including comment on the definition of "advanced telecommunications services" and "high-speed" service.[2]

## I. INTRODUCTION AND SUMMARY

CTIA shares Congress's goal of encouraging the deployment of advanced telecommunications capability to all Americans. As the FCC has reported, and as

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[1] CTIA – The Wireless Association® is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the organization covers Commercial Mobile Radio Service ("CMRS") providers and manufacturers, including cellular, Advanced Wireless Service, broadband PCS, and ESMR, as well as providers and manufacturers of wireless data services and products.

[2] In re: Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All American in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, *Notice of Inquiry*, GN Docket No. 07-45 (Apr. 16, 2007) ("NOI").

wireless carriers know from experience, mobile wireless broadband Internet access is the fastest growing segment of the U.S. broadband marketplace. Mobile wireless carriers are responding to this exploding consumer demand for mobile and broadband wireless services. U.S. commercial wireless service providers are investing billions of dollars a year, more than $24 billion to be exact, to increase the capacity of their networks so they can deliver next generation services to consumers. Wireless truly brings broadband to the person, where they are located, when they need it. No other broadband service can offer that opportunity.

In order to ensure a complete picture of the extent of advanced telecommunications capabilities, CTIA supports the Commission's efforts in this proceeding. Given the growing diversity of the United States telecommunications marketplace, the Commission should aim for over-, not under-, inclusiveness in defining "high-speed," "advanced telecommunications capability," and "advanced services." The FCC should maintain the current 200 kbps threshold, but should add additional tiers as the state-of-the-art progresses. Given significant differences in wireless and wireline broadband services currently available in the marketplace, it may be appropriate for the Commission to consider different minimum speeds for different technologies. Many consumers continue to derive significant benefits from the deployment of mobile wireless broadband capabilities, such as Enhanced Data for GSM Evolution ("EDGE"), that are in the lower bandwidth tier. They are able to access the Internet and data at broadband speeds, all in a mobile environment. Those consumer benefits should continue to be recognized and measured.

CTIA also urges the Commission to look beyond bandwidth to determine whether advanced telecommunications capabilities are being made available to Americans in a reasonable and timely fashion. Mobility has been perhaps the most important "advanced telecommunications capability" introduced in the last 30 years – with now more than 235 mobile wireless subscribers in the United States. Wireless carriers are also providing consumers with other advanced telecommunications capabilities, such as location-based services and mobile video, which are overlooked if one looks exclusively at bandwidth.

The Commission should continue to foster the buildout of networks capable of bringing high-speed data service to rural areas through technologically- and competitively-neutral universal service mechanisms. Universal service funding has enabled wireless eligible telecommunications carriers ("ETCs") to deliver voice, data, and video services to consumers located in high-cost, rural areas. Indeed, with the help of universal service support, wireless carriers are sometimes the first to provide broadband services in high-cost, rural areas. Universal service and other regulations that discriminate against wireless carriers will stymie those efforts.

## II. MOBILE WIRELESS BROADBAND IS INCREASINGLY AVAILABLE TO AMERICAN CONSUMERS

CTIA is proud of the success of mobile service providers in the broadband marketplace. Thanks to the Commission's pro-competition broadband policy, there is more facilities-based broadband competition in the U.S. than in any other country. As a result, U.S. consumers have a bevy of broadband access choices.[3]

[3] *See* Scott Cleland, *America's Unique Internet Success*, Wash. Times (D.C.), Mar. 1, 2007, *available at* 2007 WLNR 3935270.

While consumers have the option of choosing from a number of broadband access providers that include not only wireless but also cable, traditional telephone, Broadband over Power Line ("BPL") and other providers, the Commission's most recent study shows *mobile wireless* broadband additions driving the growth of high speed lines overall. In the first half of 2006, the number of broadband subscribers continued to grow. The Commission's report on *High-Speed Services for Internet Access: Status as of June 30, 2006* found that while total broadband lines grew 26% from December 2005 to June 2006, almost 60% of all new high-speed lines reported during the same period were mobile broadband wireless lines. [4] That's almost eight million new mobile wireless broadband subscribers in just six months.

Since the Commission's release of the *Eleventh Report*, next generation wireless networks have continued to flourish as mobile wireless providers aggressively invest in their networks to upgrade and expand their geographic coverage. Wireless carriers are deploying an array of wireless broadband technologies, including: Evolution – Data Only ("EV-DO"), High Speed Downlink Packet Access ("HSDPA"), Universal Mobile Telecommunications System ("UMTS"), Wideband Code Division Multiple Access ("WCDMA"), Wi-Fi, and Wi-MAX. All four nationwide carriers are currently investing in next-generation wireless infrastructure, and making decisions now on the fourth generation evolution. Companies such as Sprint Nextel and T-Mobile USA have publicly commented on their commitments to invest in the deployment of new high-speed wireless

[4] Noting the distribution of broadband subscribers among different technologies (ASDL, SDSL, cable modem, traditional wireline, satellite, fixed wireless, mobile wireless, fiber, and broadband over power line) and calculating a total of 1,323 providers of broadband access, *See* HIGH-SPEED SERVICES FOR INTERNET ACCESS: STATUS AS OF JUNE 30, 2006 at Tables 1, 8 *at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-270128A1.pdf (Jan. 31, 2007).

networks. Sprint Nextel pledged to spend more than $2 billion in building its 4G Wi-MAX network, and T-Mobile stated its intent to spend $2.7 billion in building its HSDPA network to exploit the spectrum won in last year's Advanced Wireless Services ("AWS") auction.[5]

Carriers continue to enhance their networks, broadening the availability of high-speed service to millions of Americans.[6] Collectively, wireless companies are providing wireless broadband coverage to more than 200 million Americans in communities across the country. The following is a snapshot of some of CTIA's members' high-speed wireless data service offerings:

- **Alltel:** AxcessSM Broadband service (EV-DO) offers speeds of 400-700 kilobits per second (kbps) with maximum speeds of up to 2.4 Mbps.[7] Alltel's Axcess Broadband service covers more than 44 million pops in over 100 cities.

- **AT&T Mobility/Cingular:** BroadbandConnect (HSDPA) service offers speeds of 400-700 kbps, and serves virtually all of the top 100 markets. AT&T plans to invest more than $750 million in 2007 to accelerate its global IP solutions to meet the needs of its business customers worldwide.[8]

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[5] *See* SPRINT NEXTEL ANNOUNCED 4G WIRELESS BROADBAND INITIATIVE WITH INTEL, MOTOROLA AND SAMSUNG, Sprint Nextel News Release, at http://www.2.sprint.com/mr/news-dtl.do?id=12960 (Aug. 8, 2006). *See* David Janazzo, *et al.*, T-MOBILE USA READ ACROSS: TOWERS AND ROAMERS, Merrill Lynch (Nov. 9, 2006) (noting T-Mobile spending commitment).

[6] *See* Kelly Hill, AT&T TO SPEED UP HSDPA, ADD DOZENS OF NEW MARKETS, RCR Wireless News (Apr. 2, 2007).

[7] *See* ALLTEL EXTENDS EV-DO WIRELESS BROADBAND TO MYRTLE BEACH, HILTON HEAD AND SEVERAL INLAND SOUTH CAROLINA COMMUNITIES, Press Release *at* http://phx.corporate-ir.net/phoenix.zhtml?c=74159&p=irol-newsArticle&ID=984165&highlight= (Apr. 12, 2007).

[8] *See* AT&T TO INVEST $750 MILLION-PLUS GLOBALLY IN 2007 TO SPEED ADVANCED SOLUTIONS TO BUSINESS CUSTOMERS, Press Release *at* http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=23522 (Mar. 13, 2007).

- **Sprint Nextel:** Sprint Nextel upgraded its EV-DO service in October 2006 to the EV-DO Revision A ("Rev. A") network, which now reaches more than 193 million people in more than 5,400 communities. Rev. A offers upload speeds of 350-500 kbps, and average download speeds of 600 kbps-1.4 mbps (from 400-700 kbps with EV-DO). Sprint plans to roll-out a Wi-Max network by the end of 2007.[9]

- **T-Mobile USA:** Offers mobile Internet access through its General Packet Radio Service ("GPRS")/EDGE network and operates a network of more than 8,000 wireless hotspots; T-Mobile is currently spending $2.7 billion to deploy its HSDPA network.[10]

- **Verizon Wireless:** Based on CDMA EV-DO technology Verizon is offering speeds of 400-700 kbps.[11] In February 2007, Verizon Wireless upgraded to EVDO Rev. A technology, and now covers more than 145 million consumers. BroadbandAccess customers can expect average download speeds of 600 kbps to 1.4 megabits and average upload speeds of 500-800 kbps.[12]

Deployment of this advanced broadband infrastructure is not limited to nationwide wireless providers. For example, Alaska Communications Systems offers EV-DO-based broadband coverage in Anchorage, Fairbanks, Juneau, Eagle River, and the Mat-Su Valley in Alaska, providing customers with wireless text and picture messaging and wireless broadband Internet access via its ACS Mobile Broadband offering. Cellular South offers EV-DO coverage in Starkville, Mississippi, and along the

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[9] *See Sprint Nextel Announces 4G Wireless Broadband Initiative with Intel, Motorola and Samsung,* Press Release *at* http://www2.sprint.com/mr/news_dtl.do?id=12960 (Aug. 8, 2006)

[10] *T-Mobile to Spend $2.7 Billion to Offer Advanced Services,* The New York Times, October 7, 2006.

[11] *See* Verizon Wireless, BEST WIRELESS SERVICE PROVIDER *at* http://www.vzw-whoweare.com/best/leadership.asp (accessed on May 2, 2007).

[12] *See* Verizon Wireless, BEST WIRELESS SERVICE PROVIDER *at* http://www.vzw-whoweare.com/best/leadership.asp; FACTS ABOUT…VERIZON WIRELESS NETWORK *at* http://news.vzw.com/pdf/Verizon_Wireless_Press_Kit.pdf (accessed on May 2, 2007).

Mississippi Gulf Coast, giving Cellular South's subscribers in these markets wireless broadband Internet access. Cellular South specifically targeted the Gulf Coast for EV-DO deployment to help with the recovery from Hurricanes Katrina and Rita and in preparation for future natural disasters. Midwest Wireless, Mobile Satellite Ventures, NTELOS, and many others also have deployed mobile wireless broadband services and continue to do so today.[13] According to the National Telecommunications Cooperative Association's 2006 Wireless Survey Report, 70% of carrier respondents providing wireless service offer broadband data, 38% mobile voice, and 27% non-broadband data.[14] Over half of the survey respondents not currently offering wireless service are considering doing so in the future.[15]

Commercial providers are not the only ones developing advanced wireless data networks. Public safety users are poised to benefit from advances in the wireless space. In New York City, public safety users will benefit from the deployment of a citywide

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[13] *See, e.g.* ACS MOBILE BROADBAND INTERNET ANYPLACE *at* http://www.acsalaska.com/Cultures/en-US/Personal/Mobile+Broadband/; WIRELESS BROADBAND FROM CELLULAR SOUTH *at* http://www.cellularsouth.com/broadband/; Wally Northway, *Cellular South opens Technical Operations Center*, 2007 WLNR 7069471 (Mar. 12, 2007); BUNDLE THE YAK WITH THE UNLIMITED BROADBAND ACCESS *at* http://www.cellularone.bm/pages/001_2.php?omenu=m00&menu=m001_2; Midwest Wireless, HIGH-SPEED INTERNET *at* http://www.midwestwireless.com/Home/InternetMore/HighSpeedInternet/Default.htm; MOBILE SATELLITE VENTURES (MSV) ISSUED KEY PATENT IN BROADBAND MULTI-SPOTBEAM SATELLITE SYSTEMS *at* http://www.msvlp.com/media/press-releases-view.cfm?id=74; *Mobile Satellite Ventures to offer satellite-based broadband*, 2007 WLNR 7220775 (Apr. 6, 2007); Why share your bandwidth with all your neighbors? *at* http://www.ntelos.com/landline/residential/broadband.html.

[14] National Telecommunications Cooperative Association, NTCA 2006 WIRELESS SURVEY REPORT 3, 6 (Fig. 2) *at* http://www.ntca.org/content_documents/2006NTCAWirelessSurveyReport.pdf (January 2007).

[15] *See id.* at 3, 7.

interoperable, wireless broadband network using 10 MHz of spectrum in the 2.5 GHz band.[16] Public safety users in the National Capital Region will also benefit from the development of a regional broadband wireless network in Washington, DC and surrounding areas. The National Capital Region's network is being deployed using 2.5 MHz of spectrum within the existing 700 MHz public safety allocation.[17]

## III. THE FCC SHOULD NOT OVERLOOK THE UNIQUE ATTRIBUTES OF SPECTRUM-BASED BORADBAND SERVICES

While wireless has been heralded as a potential "third pipe" into the home, it is important to note the differences between wireline and wireless broadband service.

First, it is important to remember that mobile wireless broadband delivers a unique distinct advantage: mobility. Mobility is the very definition of an "advanced telecommunications capability." Mobile wireless isn't another pipe into the *home*, it's a pipe to the *person*, wherever they are. Consumers are not tied to their physical connection to the network with mobile wireless. Whether consumers are on the train to work or in an airport across the country, mobile wireless broadband subscribers have an unprecedented amount of freedom to access information on the go. Wireless also offers other advanced capabilities like location-based services and mobile video that, while reliant on bandwidth, are advanced capabilities lost in the shuffle when only bandwidth is considered.

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[16] Press Release, *Mayor Bloomberg Announces Selection of Northrop Grumman to Build High Speed Wireless Data Network for Police Officers, Firefighters and Other City Workers*, PR-326-06 (Sept. 12, 2006), *available at* http://home2.nyc.gov/html/doitt/html/news/news_awards.

[17] *Request by the National Capital Region for Waiver of the Commission's Rules to Allow Establishment of a 700 MHz Interoperable Broadband Data Network*, WT Docket No. 96-86, Order, DA 07-454 (rel. Jan. 31, 2007).

Second, the nature of wireless service – a radio-based service utilizing a shared resource – renders some comparisons to the wireline world inapt, most notably the concept of network harm. Wireless is a shared network medium. Thus, unlike traditional wired broadband where each user has a dedicated pipe to their home, the wireless user must share the available bandwidth with all other users – both voice and data users – in their vicinity.[18] Poor device performance, both in terms of voice and data service, can result in fewer connections per cell, or the need for increased cells to maintain system capacity, limiting or harming consumers' access to the network.[19]

Due to the nature of electromagnetic spectrum as a finite resource, carriers are limited in their ability to deploy network capacity by the amount of spectrum they have. The Commission's recently concluded Advanced Wireless Services ("AWS") auction and the upcoming 700 MHz auction are important steps to bringing more spectrum to commercial wireless carriers. As the Commission makes more spectrum available through the auction process, carriers will be better equipped to bring innovative wireless broadband access to all Americans.

Finally, the dynamic nature of the connection opens mobile wireless to the prospect of interference. Unlike the relatively static environment of a wireline, mobile wireless broadband is, as its name implies, both mobile and wireless. Because wireless technologies rely on a shared resource with high levels of frequency coordination and re-use within the network, adding mobility means not only contending with the natural

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[18] Comments of CTIA – The Wireless Association®, RM-11361, Exhibit C – Wireless Handsets Are Part of the Network by Charles L. Jackson, § 3.1.1 (Apr. 27, 2007).

[19] *Id.*

spectral environment, but also with other devices, both on their network and others. This complex level of coordination takes place both in the access devices and in the network in order to provide the highest level of service.

## IV. PUBLICLY AVAILABLE INFORMATION AND CURRENT DEFINITIONS OF "HIGH-SPEED" AND "ADVANCED TELECOMMUNICATIONS SERVICE" PROVIDE SIGNIFICANT DATA ON SERVICE AVAILABILITY

CTIA believes that the baseline definition of broadband service should be maintained in order to ensure that the FCC may continue to compile a full picture of the advanced telecommunications capabilities available to American consumers. In its *Fourth Report*, the Commission used the term "advanced telecommunications service" to describe services and facilities that provide transmission speeds above 200 kbps both upstream and downstream. [20] The Commission also used "high-speed" to describe services that are only capable of 200 kbps in one direction.[21] Changing these definitions will distort measurements of the marketplace by ignoring the continued importance of "first generation" wireless broadband services.

Consumer demand for faster speeds and greater capacity are driving carrier investment. As described above, wireless carriers are investing substantial sums to bring better network coverage and faster speeds to their customers. While buildout has brought faster speeds to more populated areas more quickly, a redefinition of broadband service

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[20] In re: Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All American in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, GN Docket No. 04-54, Fourth Report to Congress, 19 FCC Rcd 20540, 20551 (2004).

[21] *Id.*

by the Commission would overlook the importance of existing 3G technologies to bring high-speed access to underserved areas.

There is still significant consumer benefit at the lower end of the broadband continuum. Carrier investment in 3G technologies has brought wireless data – and in some cases the only broadband service – to parts of rural America that would otherwise not see investment. Services available from those carriers who employ 3G technologies like EDGE – that provide maximum downlink speeds of 384 kpbs – are far and away better than dial-up alternatives. This level of service provides access to the overwhelming majority of broadband uses in the United States. Raising the minimum speed for "broadband" service does nothing to help bring faster data access to underserved areas and may provide disincentives for carriers to buildout 3G networks.

Rather than raise the minimum speeds that are considered "high-speed," the Commission should consider a tiered definition. Speeds that meet the existing threshold for "high-speed" and "advanced telecommunications services" are important first steps for the nascent mobile wireless broadband service. However, gathering data on higher speed services will provide a more accurate picture of the broadband marketplace. A tiered definition with 200 kbps as the floor of a first tier will adequately balance the Commission's desire for more accurate broadband data with the reality of broadband speeds.

The Commission also asks for comment on the collection of data on availability of broadband service. CTIA suggests that rather than changing the existing reporting requirement for broadband, the Commission should use the information on service availability that carriers already provide to consumers. Many carriers already provide

their customers with access to digital coverage maps on the carriers' website.[22] This format will allow the FCC, or any other agency, federal or state, to manipulate the data into a 9-digit zip code format, census tract, or any other format that is determined useful. This approach ensures minimal confusion for consumers between the information they receive from companies about their coverage and the information they receive from the government. Keep in mind that the wireless industry provides wireless broadband to areas that don't receive mail. In these cases, zip codes don't matter.

## V. MOBILE WIRELESS BROADBAND CARRIER PRACTICES ARE DRIVEN BY CONSUMER DEMAND FOR HIGH-QUALITY, INNOVATIVE RADIO-BASED SERVICES

The Commission's NOI seeks comment on the extent that carriers engage in restricting consumers' access to network resources and features of their access devices – two issues being separately addressed in the Commission's proceedings on the Skype Petition and the *Broadband Industry Practices Notice of Inquiry*.[23] To the extent that any restrictions occur at all, carrier practices with regard to broadband Internet access and data usage are driven by consumer demand for high-quality service.

An oft-cited example of restricting data use is the concept of the "walled garden." The "walled garden" approach, which limits subscribers to wireless Internet access on handsets to pages either designed by the carrier or to those that had been pre-authorized

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[22] *See e.g.*, http://www.cingular.com/coverageviewer/; http://www1.sprintpcs.com/explore/coverage/CoverageInfo.jsp?ATR_ExtraOne=UHP_Personal_Coverage; http://www.t-mobile.com/coverage/; http://www.verizonwireless.com/b2c/CoverageLocatorController?requesttype=NEWREQUEST

[23] Petition to Confirm a Consumer's Right to Use Internet Communications Software and Attach Devices to Wireless Networks, Skype Communications S.A.R.L., RM-11361 (filed Feb. 20, 2007); In re: Broadband Industry Practices, WC Docket No. 07-52, FCC 07-31, Notice of Inquiry (rel. Apr. 16, 2007).

and optimized for delivery to wireless handsets, is not a new practice, nor is it unique to wireless. Prodigy and America Online, pioneers of dial-up access to the Internet and information services generally, both began with a walled garden approach to the Internet, tailoring content to be more easily used by the customers. However, both companies abandoned their walled garden policies when faced with competition from other access providers that provided customers more access to the Internet and technologies were developed allowing easier access to information.

The same trend has occurred in the wireless space, where wireless carriers have largely abandoned a "walled garden" approach as the exclusive means of obtaining Internet access, due in part to the ability of carriers to use intelligent networks to optimize data streaming to handsets from the Internet. Network elements dynamically convert Internet headers and content to better accommodate handset capabilities and spectrum availability. Some consumers, however, prefer the walled garden approach to wireless Internet access. Mobile virtual network operator Disney Mobile offer consumers the ability to restrict access to content on their handsets. Consumers who want to be able to give their children access to mobile data, but still have control over the content on the handset are free to choose such an option. Although some wireless carriers offer secured access to specific content, wireless Internet access is broadly available on numerous devices, illustrating the responsiveness of the wireless carriers to meeting consumer demands.[24]

Similarly, although users are free to install software on their handsets and laptops, some carriers set limitations on what users can do with their connection to the network.

[24] *See* Comments of CTIA – The Wireless Association, RM-11361, at 17-19, Appendices A and B (filed Apr. 30, 2007).

Some carriers have opted to define a set of services for use on their wireless data network, while others have maintained a liberal policy allowing customers flexibility to use the network moderately as they see fit. For example, Verizon Wireless and AT&T choose to explicitly define the Internet services for which they are providing access to their network.[25] By way of contrast, Sprint's terms and conditions are somewhat less restrictive and T-Mobile's terms and conditions of use contain no such restrictions.[26] Determining the relative merits of the different models of wireless broadband should be judged by consumers, based upon their individual needs, not by regulators ill-suited to choosing winners and losers in a competitive market.

The Commission's NOI also questions carriers' decisions to disable features on wireless handsets.[27] As with decisions to restrict consumers' use of network resources, carrier decisions to disable features on handsets are driven by consumer demand. Carrier disabling of handset features occurs for a variety of pro-consumer reasons. Carriers may choose to have features removed or disabled to provide consumers with lower cost handsets or to extend battery life. The most often cited example, however, is the disabling of features for security purposes. Faced with the possibility that improperly configured handsets could betray consumers' personal data, Verizon Wireless removed

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[25] *See* http://www.verizonwireless.com/b2c/store/controller?item=planFirst&action=viewPlanList&sortOption=priceSort&typeId=5&subTypeId=13&catId=409 (last accessed Mar. 27, 2007); http://www.cingular.com/b2b/downloads/terms_wirelessDataService.pdf (last accessed Feb. 12, 2007).

[26] *See* http://www.sprintpcs.com/common/popups/popLegalTermsPrivacy.html; http://www.t-mobile.com (Terms and Conditions, Term Number 7 (Use of Service)).

[27] NOI at 9-11.

part of the Bluetooth wireless standard, rendering such an attack impossible.[28] Wireless customers seeking those Bluetooth capabilities despite the security risks have a number of competitive options to choose from.

With approximately 700 mobile wireless handsets on the market in the United States, consumers have a number of options to choose from when looking for specific features. Among those 700 handsets are offerings from all four nationwide carriers that run on the Windows Mobile operating system, for which a number of mobile applications can be easily downloaded from the Internet to add functionality that consumers desire.[29] So although one particular handset may have had a capability disabled, many other devices with that same capability are available on the market from the major wireless carriers.

In short, any contention that consumers have been harmed by the efforts of wireless carriers to ensure quality of service is disputed by existing market conditions. Consumers have the freedom to choose the set of wireless broadband features they value most and are no less likely to be satisfied by a more restrictive access model. Most important for purposes of this inquiry, the wireless carrier practices discussed above have no negative impact on the deployment of "advanced telecommunications capabilities." Indeed, these practices ensure the quality and reliability of those services.

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[28] *See* Opperman v. Cellco Partnership, Los Angeles Superior Court, Case No. BC326764, Notice of Class Action Settlement and Approval Hearing, Jan. 6, 2005, *available at* http://www.verizonwireless.com/pdfs/v710settlement/Second%20Notice%2001-4-06%20FINAL.pdf.

[29] Comments of CTIA – The Wireless Association®, RM-11361, Appendix B, filed Apr. 30, 2007.

## VI. COMMISSION POLICIES ON UNIVERSAL SERVICE HAVE A MAJOR IMPACT ON BROADBAND SERVICE AVAILABILITY

The wireless industry shares the Commission's concerns about the availability of advanced telecommunications services in rural areas. The high costs associated with introducing service to rural areas can be a daunting financial barrier. How the Commission addresses and resolves the problems with the universal service fund will have a profound impact on how quickly advanced telecommunications services are rolled out across the U.S.

Communications networks, by their very nature, are not single use networks. Modern wireless networks are designed to carry both voice and data over network infrastructure. Universal service and intercarrier compensation regulations that favor wireline incumbents and fail to adequately support wireless network deployment constitute a significant barrier to the deployment of advanced services in high-cost areas. Making universal service funds available to wireless carriers lays important groundwork for advanced wireless infrastructure.

Commission policies should encourage companies who receive funding to buildout efficient supported networks that can easily be adapted to provide advanced broadband capabilities. Recent proposals to reform the universal service high-cost fund threaten mobile and broadband development in underserved areas.[30]

The Federal-State Joint Board on Universal Service's recent Recommended Decision is one such proposal. The Joint Board proposes to freeze funding for

[30] Given the long loop lengths in these rural areas, wireless technology may offer the most cost effective broadband solution.

competitive ETCs on a state-by-state basis until the next Joint Board recommendation.[31] While the wireless industry supports the Joint Board's goal of securing the long-term stability of the high-cost fund, protecting incumbents at the expense of their competitors diminishes the incumbent LECs' incentives to deploy broadband technologies and does nothing to serve consumers.

Since 1998, more than $24 billion of high-cost universal service support has been used by wireline carriers – and about $2 billion by wireless – to lay the groundwork for providing broadband service to high-cost areas.[32] Wireless ETCs, for example, have used this support to build out voice, data, and video networks to areas that previously had no service at all. Commission policies that provide wireless ETCs with the funding they need to bring state-of-the-art mobile communications networks to underserved areas ultimately serve as a springboard for carriers to make the additional investment in unsupported services like broadband.

In adopting policies for the universal service fund, the Commission must remember that both incumbents and competitors rely on support for underlying networks to bring both voice and advanced data services to rural America. The Federal-State Joint Board's recent Recommended Decision to cap competitive ETC universal service funding will harm wireless deployment in rural America and it should not be adopted by the FCC.

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[31] In re: High-Cost Universal Service Support, Recommended Decision, Federal-State Joint Board on Universal Service, WC Docket No. 05-337, FCC 07J-1 (May 1, 2007).

[32] Distribution of High Cost Support Between ILECs, Wireless CETCs and Wireline CETCs 1998 Through 2006, Universal Service Administrative Company, *available at* http://www.usac.org.

## VII. CONCLUSION

CTIA shares Congress's goal of encouraging the deployment of advanced telecommunications capability to all Americans and mobile wireless carriers are responding to exploding consumer demand for mobile and broadband wireless services. Given the growing diversity of the United States telecommunications marketplace, CTIA supports the Commission's efforts to gather data on, and ensure the availability of, advanced telecommunications capabilities for all Americans. To that end, CTIA supports Commission policies that ensure a complete and accurate picture of the advanced telecommunications landscape.

Publicly available digital maps of coverage in the wireless space combined with a tiered definition of broadband service will ensure the most current and comprehensive information on data service availability. Despite higher speed options in some areas, consumers with service at the lowest tier of broadband speeds derive incredible benefit over dial-up alternatives.

Finally, Commission policies on universal service and intercarrier compensation should foster the benefits consumers derive from increased availability of competitors to

the traditional wireline broadband providers, as well as the dimension of mobility that other broadband platforms cannot provide.

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